

What is claimed is:

1. A manufacturing method of a circuit substrate, in which an electronic circuit is formed on a surface of a base member by a solution jetting device, the manufacturing method comprising:

jetting liquid drops of a solution which is supplied into a nozzle having a discharge port with an inner diameter of 0.1 μm to 100 μm and includes a plurality of fine particles to form an electronic circuit by melting and sticking to one another and a dispersant for dispersing the fine particles, from the discharge port toward the surface of the base member by applying a voltage of an arbitrary waveform to the solution to charge the solution; and

exposing the jetted liquid drops received on the surface of the base member to light or heat to make the fine particles melt and stick to one another.

2. The manufacturing method of claim 1; wherein an average diameter of the fine particles is lower than or equal to 100nm.

3. The manufacturing method of claim 1; wherein the fine particles are made of a conductive material.

4. The manufacturing method of claim 1; wherein the fine particles are made of a semi-conductive material.

5. The manufacturing method of claim 1; wherein the fine particles are made of an insulating material or a dielectric material.

6. The manufacturing method of claim 1; wherein an inner diameter of the discharge port is smaller than or equal to 30 μm .

7. The manufacturing method of claim 1; wherein an inner diameter of the discharge port is smaller than 20 μm .

8. The manufacturing method of claim 1; wherein an inner diameter of the discharge port is smaller than or equal to 8 μm .

9. The manufacturing method of claim 1; wherein an inner diameter of the discharge port is smaller than or equal to 4 μm .

10. A manufacturing method of a circuit substrate, in which an electronic circuit is formed on a surface of a base member by a solution jetting device, the manufacturing method comprising:

jetting liquid drops of a solution which is supplied into a nozzle having a discharge port with an inner diameter of 0.1

μm to $100\mu\text{m}$ and includes a plurality of adhesion particles for adhering fine particles to form an electronic circuit by melting and sticking the fine particles to one another and a dispersant for dispersing the adhesion particles, from the discharge port toward the surface of the base member by applying a voltage of an arbitrary waveform to the solution to charge the solution; and

scattering the fine particles on the jetted liquid drops received on the surface of the base member to adhere the fine particles to the adhesion particles;

removing fine particles which are not adhering to the adhesion particles among the scattered fine particles, from the surface of the base member; and

exposing the surface of the base member to light or heat to make the fine particles melt and stick to one another.

11. A circuit substrate manufactured according to the manufacturing method of claim 1.

12. A circuit substrate manufactured according to the manufacturing method of claim 10.

13. A manufacturing device of a circuit substrate, in which an electronic circuit is formed on a surface of a base member by a solution jetting device, the manufacturing device comprising:

a voltage applying section for jetting liquid drops of a solution which is supplied into a nozzle having a discharge port with an inner diameter of $0.1\mu\text{m}$ to $100\mu\text{m}$ and includes a plurality of fine particles to form an electronic circuit by melting and sticking to one another and a dispersant for dispersing the fine particles, from the discharge port toward the surface of the base member by applying a voltage of an arbitrary waveform to the solution to charge the solution; and

a melting-sticking section for giving light or heat to the jetted liquid drops received on the surface of the base member to make the fine particles melt and stick to one another.

14. The manufacturing device of claim 13; wherein an inner diameter of the discharge port is smaller than or equal to $30\mu\text{m}$.

15. The manufacturing device of claim 13; wherein an inner diameter of the discharge port is smaller than $20\mu\text{m}$.

16. The manufacturing device of claim 13; wherein an inner diameter of the discharge port is smaller than or equal to $8\mu\text{m}$.

17. The manufacturing device of claim 13; wherein an inner diameter of the discharge port is smaller than or equal to $4\mu\text{m}$.